

23-1

Revise structural performance criteria in TRM, NEI 97-06, and DG-1074 as follows:

Steam generator tubing shall retain structural integrity over the full range of normal operating conditions (including startup, operation in the power range, hot standby, and cooldown and all anticipated transients included in the design specification) and design basis accidents. This includes retaining a margin of 3.0 against burst under normal full power operation and a margin of 1.4 against burst under the limiting design basis accident concurrent with a safe shutdown earthquake.

Revise Tube Integrity Assessment Guidelines to include the following:

The factor of 3 and 1.4 criteria should be supplemented as necessary to ensure structural integrity over the full range of normal operating conditions (including ...) and design basis accidents. [some discussion of this point in the guidelines may be useful to the user.] Supplemental criteria include:

Primary stress should not exceed yield strength over full range of normal operating conditions (including ...).

Loadings contributing to combined primary plus secondary stress should not lead to burst (as consequence of tensile overload or cyclic loading) under the full range of normal operating conditions (including ...) and design basis accidents.

This includes: (1) appropriate consideration of thermal loads (2) retaining a margin

$$P_B \geq 3 \times \Delta P_{\text{max}} + \frac{\Delta P_{\text{max}}}{J/20}$$